

REMARKS

Claims 1-4 and 8-11 are pending with entry of this Amendment.

Please cancel claims 5-7 and 12 without prejudice.

Claims 1-4 and 8-11 stand rejected.

The following sections address *in seriatim* the points in the office Action requiring response.

Objection to the Drawings

The Office objected to the figures as not showing every feature of the invention specified in Claim 12. Claim 12 has been cancelled without prejudice. Reconsideration and withdrawal of the objection to the figures are requested.

Rejection under 35 U.S.C. § 102(b)

On page 3 of the Office Action, the Office rejected Claims 1-4 and 8-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Pub. No. 2004/0114327 to Sri-Jayantha (now Patent No. 6,876,550). Claim 12 has been cancelled without prejudice. Applicant has amended independent Claim 1 to include the subject matter of Claims 5-7. The rejection of the subject matter of Claims 5-7 is addressed below. By admission of the Office, Sri-Jayantha fails to disclose each and every element of independent Claim 1, as amended, and Applicant respectfully requests withdrawal of the rejection thereof.

Claims 2-4 and 8-10 are dependent upon independent Claim 1. Claim 1 is in condition for allowance. Thus, by virtue of dependency alone and without addressing the merits of the rejection, Claims 2-4 and 8-10 should be allowed with Claim 1.

Reconsideration and withdrawal of the rejection of Claims 2-4 and 8-10 are respectfully solicited.

Rejection under 35 U.S.C. § 103(a)

On page 4 of the the Office Action, the Office improperly rejected Claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over Sri-Jayantha in view of U.S. Patent No. 6,336,499 to Liu. Claims 5-7 have been cancelled without prejudice and the subject matter thereof incorporated into Claim 1. Applicant submits that the Office has not met its burden of providing a *prima facie* case of obviousness with respect to the subject matter of Claims 5-7, now incorporated into independent Claim 1.

Sri-Jayantha discloses a cooling apparatus for a CPU having a mobile heat sink. The mobile heat sink includes a rotating metallic fan composed of fan blades and a rotating shaft. The bottom end of the rotating shaft is placed in close proximity to a processor die, or chip, so that heat generated by the die can effectively flow into the shaft for transport to the blades. The shaft is located in sufficient proximity to the die to remove heat therefrom but not interfere with the rotational properties of the shaft. (*See* Sri-Jayantha, Fig. 2 and Col. 3, lines 18-30). A thin film of fluid is introduced between the fan base housing and the shaft for assisting the flow of heat from the stationary housing to the rotating shaft and onto the fan blades. (*See* Sri-Jayantha, Fig. 2 and Col. 3, lines 55-58). The rotation of the shaft causes the fluid to circulate around in its channel which promotes transfer of heat to the moving shaft and blades. The fluid is self-retained within the volume provided for it by virtue of its surface tension at the interface where it

comes into contact with ambient air. Sri-Jayantha also discloses that a conventional sealing method could be employed to contain the fluid. (*See* Sri-Jayantha, Fig. 2 and Col. 4, lines 3-10). The blades of the fan are used as cooling fins. Rotation of the fan generates turbulences at the fan blades for transferring as much heat as possible to the environment and generation of an air stream is a secondary effect. (*See* Sri-Jayantha, Col. 5, lines 6-22). The Office admits that Sri-Jayantha fails to disclose the claimed subject matter of Claims 5-7, now incorporated into Claim 1, and improperly utilizes Liu in an attempt to supplement the deficiencies of Sri-Jayantha.

Liu discloses a conventional passive heat sink for a CPU. The passive heat sink is a cylindrical heat sink 1 having a retaining plate 2, holding down plate 3, C-shaped clamping ring 4, and an axially protruding coupling portion 11 having plural radial fins at the outer periphery thereof. A fan mount 13 fits over the top end of the cylindrical heat sink 1 and surrounds only a portion of the coupling portion 11 and respective radial fins. (*See* Liu, Col. 1, line 61 – Col. 2, line 13).

The Office, however, incorrectly asserts that the fan mount 13 is “an air guiding cover plate (13) [that] has a central aperture coaxially encloses [*sic*] a shaft for a purpose of guiding the airflow from outside into the vicinity of the shaft to increase the heat transfer rate of the heat transfer device.” *See* Office Action, page 4.

It is unclear where in Liu the support for the Office’s assertion may be found. For example, Liu clearly discloses that reference numeral 13 is a fan mount upon which a fan 7 (see Fig. 4) may be mounted. Liu is clearly silent that the fan mount 13 is utilized or

suitable as an air guiding device that comprises a cover plate separating an air suction side and an air release side, the cover plate coaxially enclosing the shaft and providing a central aperture to define a flow channel in the vicinity of the shaft, as required by the subject matter of Claims 5-7 incorporated into independent Claim 1.

In contrast, the only portion of Liu discussing any guidance of an air stream is Column 2, lines 38-46. In this portion, the embodiment described by Liu provides a cylindrical heat sink 1 having a heat conducting core member 14 adapted to receive heat from a CPU in the CPU holder 5. The heat sink 1 provides two air passageways 15, 16 symmetrically disposed on the inside of the sink and adapted to guide currents of air from the fan 8 at the top of the cylindrical heat sink to the CPU holder 5. (See Liu, Fig. 4, Col. 2, lines 38 to 46). These passageways 15, 16 are unrelated to the fan mount 13 as the fan mount is not designed to enclose the entirety of these passageways to direct air onto the CPU holder 5; rather, the fan mount serves only for mounting the fan 7.

For the sake of argument, assuming that the Office's assertion is correct and that the fan mount of Liu guides an air stream to the CPU holder 5, there is no disclosure in Liu that the fan mount 13 *separates an air suction side and an air release side* or that the fan mount 13 *coaxially encloses a shaft and provides a central aperture to define a flow channel in the vicinity of the shaft* as required by Claim 1, as amended. No air guide, as claimed, is described, suggested or taught by any of the references of record.

For these reasons at least, the Applicant respectfully submits that the Office has failed to meet its burden of proving a *prima facie* case of obviousness with regard to the subject matter of Claims 5-7, now incorporated into independent Claim 1.

Reconsideration and withdrawal of the rejection is respectfully solicited.

Conclusion

Reconsideration and withdrawal of the rejection of Claims 1-4 and 8-10 are hereby respectfully requested. The Applicant believes that the present application is in condition for allowance and an Action to this effect is respectfully requested.

Should any fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of the same, such a petition is made and the Office is authorized to charge such fees to Deposit Account No. 04-1679.

Respectfully submitted,

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